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PATENT COOPERATION TREATY

PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

REC'D 08 FEB 2005

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(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 20571846	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).
International Application No. PCT/AU2003/001366	International Filing Date (day/month/year) 15 October 2003	Priority Date (day/month/year) 15 October 2002
International Patent Classification (IPC) or national classification and IPC Int. Cl. <sup>7</sup> C22B 19/14, 19/16, 5/10, 1/245, 13/00, C21B 13/04		
Applicant THE AUSTRALIAN STEEL COMPANY (OPERATIONS) PTY LTD et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheet(s).

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand 10 May 2004	Date of completion of the report 27 January 2005
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6283 3929	Authorized Officer  <b>ROGER HOWE</b> Telephone No. (02) 6283 2159

**I. Basis of the report**

## 1. With regard to the elements of the international application:\*

the international application as originally filed.

the description, pages , as originally filed,  
pages , filed with the demand,  
pages , received on with the letter of

the claims, pages , as originally filed,  
pages , as amended (together with any statement) under Article 19,  
pages , filed with the demand,  
pages , received on with the letter of

the drawings, pages , as originally filed,  
pages , filed with the demand,  
pages , received on with the letter of

the sequence listing part of the description:  
pages , as originally filed  
pages , filed with the demand  
pages , received on with the letter of

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language which is:

the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

the language of publication of the international application (under Rule 48.3(b)).

the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

contained in the international application in written form.

filed together with the international application in computer readable form.

furnished subsequently to this Authority in written form.

furnished subsequently to this Authority in computer readable form.

The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

4.  The amendments have resulted in the cancellation of:

the description, pages

the claims, Nos.

the drawings, sheets/fig.

5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	YES
	Claims 1-32	NO
Inventive step (IS)	Claims	YES
	Claims 1-32	NO
Industrial applicability (IA)	Claims 1-32	YES
	Claims	NO

**2. Citations and explanations (Rule 70.7)**

**Citations:**

D1: EP 508166 A2  
 D2: EP 745692 A1  
 D3: WO 1991/009977 A  
 D4: EP 174641

**Novelty (N), Inventive Step (IS): Claims 1-32**

D1 and D2 both individually disclose the process defined in claim 1 i.e. the heating of a composite body of zinc containing material and carbonaceous material so as to reduce the zinc and vaporise it while not melting any iron. These documents also either explicitly disclose the features of the dependent process claims or those features would be obvious when these documents are read in the light of the general knowledge of a person skilled in the art.

D1 - D4 each individually disclose the apparatus defined in claim 17 ie a furnace chamber for forming the reduction zone, a means for collecting zinc vapour and a means for cooling the zinc vapour. These documents also either explicitly disclose the features of the dependent apparatus claims or those features would be obvious when these documents are read in the light of the general knowledge of a person skilled in the art.

Therefore claims 1 to 32 can not be considered to be Novel or involve an Inventive Step in the light of the listed documents.